How might we raise money for poor communities and countries with the use of technology?

By Nick F & Matt B
Why did we choose this project?

Matthew: I chose this project for Genius Hour because I love tech and helping people that are struggling and in need.

Nicholas: I chose this project because I really like working with technology and I want everyone to have a happy and fun life with what they want.
What did we decide to make and why?

We decided to use a makey makey to help us with our competitions and relate it to our Genius Hour question. The competitions were made to raise money for Grameen Australia who are an organisation who assist poor people/families by providing training to help start a small business.

For the first competition, we made two pressure plates for competitors to run between, however only used one for the start and finish due to not having enough wiring for both. We did create a solution part way through, but decided not to use it to make sure everyone did the same thing. We decided to make the distance for the fitness competition 5m. We thought that 5m was a reasonable distance because they had the chance to run.
We also made a game by making a box with a button that activated when pressed, or in the case of the game, hit by a ball. The button was connected to scratch and showed a hit on the computer. If the button was missed, there was still a chance of getting a score. Under the box we built a board with containers that also scored when the ball went in. We made the containers 15 cm tall to make sure the ball didn't bounce out. Each person had 10 shots and the highest score wins.
How does the makey makey work?

The makey makey works by having a full circuit. This means that the cords need to be connected to the board. If one is connected to the space bar hole and the other cord is connected to the Earth hole, to make the circuit the cords from each part need to touch. You can also create the circuit by touching each end so the circuit goes through you to connect the whole thing together. It can also connect with the cords touching foil or metal.

**Explanation**
The makey makey has a board and cords. You squeeze the area around the metal clip and the clip opens, then you put them in the holes. To make a circuit, connect another cord to 'Earth' and then connect those together. That is one way to make a circuit. When you make a full circuit, it will let the command flow through and activate the command that has been made on scratch.
The 2 Makey Makey cords connected together to make a full circuit.

Makey Makey Cord Connected to Space Bar on Makey Makey Board.

Makey Makey Cord Connected to Earth Area on Makey Makey Board.

The makey makey cord connecting the board to the computer.
**How does the pressure plate work?**

- **Makey Makey cord connected to the top foil**
- **The foil connected to the inside of the top of the pressure plate**
- **The cardboard to make sure the foil doesn't connect until it is pushed**
- **Makey Makey cord connected to the bottom foil so when the 2 parts of foil connects the circuit is complete**
- **The foil connected to the inside of the bottom of the pressure plate**
What did we learn?

Grameen Australia are nice people who help people in need or are struggling. We learnt that for our project it might be better to choose a foundation that people know better so they will want to donate to the foundation more. The main thing that we learnt was how to use makey makey and scratch better, and taught ourselves more about technology in the process of teaching others.
What challenges did we face?

We had challenges cutting wires, making a pressure plate and coding a makey makey. We have never done these things before (except Matt has cut wires) so we needed to find out how to use these and it takes a bit of time to be able to learn how.
How did we overcome them?

We had some trouble with the makey makey and scratch at the start because we had no experience. Nick learnt how by looking at a website about makey makey. For scratch, it was a matter of trial and error and he just kept going until we were able to get a better understanding of how it worked. We also had some help from Mr S based on his experience.

Matt had some trouble with all the wires being cut so he needed his dad's help and he needed some help with the pressure plate too. Nick’s sister gave advice with the layout and wording of the slideshow. Nick’s dad helped cut some cardboard for one of our competitions and helped with the trial runs by giving them a go. Nick’s mum helped with finding a good foundation to donate to based in Australia so that we could help people in poorer communities.
How did we overcome them?

Both of us had a lot of trouble with quite a few things we did. One thing that didn’t work at first was our makey makey because we didn’t know how to use it. We kept trying though because we wanted to do a good job. We really liked our idea and we wanted to see it succeed. Every time we had another go we learnt something new to help make new edits/improvements.

Our final products had a few errors but what we were trying to do still worked the way we wanted. We had a lot of success doing our project and hopefully now in our own small way we have helped make some less fortunate families’ lives better. We asked for guidance so we had different perspectives and opinions/ideas to make the project better.
Grameen Australia: Our Innovations Enable Poor Families To Increase Their Incomes And Build Financial Security. Grameen Australia helps poor people reach their full potential in life and connect their skills with what they need. Donating a little bit of money can help poor people to do so many more things and will be able to live a happier life.

Grameen Australia-Link!!!
Running and throwing comp info

In week 9 we hosted a running competition for 3/4’s and a throwing competition for 5/6’s. A gold coin donation was needed to enter and if you are in years 3-6 you could participate. In the running competition you had to run to a wall touch the pressure plate and go back and touch the pressure plate on the other side of the course. You had 30 seconds and whoever wins will get a packet of lollies and a 3D printed item.

For the throwing competition it was also a gold coin donation to enter. You had to stand 3 metres away from a button and if you hit it you get 20 points but depending on what the number is on the bucket below determines how many extra points you get. You have 10 shots. The prize was also a packet of lollies. The winners will be announced over the loudspeaker on the expo day. In total we raised $15.
Grameen Australia Help

Grameen Australia can transfer all the money raised to so many unfortunate people. Even $15 can make a huge difference. This money together with other donations will help this organisation to train people so that they can get a good job or even start their own successful small businesses.

This little fundraiser we made has also hopefully raised awareness of the work Grameen Australia does in their support of poor families. You can donate any time on the Grameen Australia website.
Photos of the running comp
Photos of the throwing comp (No pictures of real competition just the setup)
Photos of Scratch Programs

This tells scratch to reset the score.

This tells scratch to make the ball fly into the basket.
Photos of Scratch Programs

These commands tell Scratch to add a score to the counter and tell it to say yeah.

This tells Scratch to reset score.

These commands tell Scratch to add a score to the counter and tell it to say yeah.
<table>
<thead>
<tr>
<th>Websites</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Author / Organisation</td>
<td>Year</td>
<td>Title</td>
<td>URL</td>
</tr>
<tr>
<td>The Grameen Foundation</td>
<td>2016</td>
<td>Grameen Foundation</td>
<td>LINK!!!!</td>
</tr>
<tr>
<td>Makey Makey</td>
<td>Unknown</td>
<td>Getting Started with Makey Makey &amp; Scratch</td>
<td>LINK!!!!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Images</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>Source</td>
<td>Link</td>
<td></td>
</tr>
<tr>
<td>Hillary</td>
<td>Flickr-CC Search</td>
<td>LINK!!!!</td>
<td></td>
</tr>
</tbody>
</table>
THE CREW
THE END

Thanks For Watching